

| | Type | L # | Hits | Search Text | DBs | Time Stamp |
|----|------|-----|------|--|--|---------------------|
| 1 | BRS | L6 | 1550 | logical\$1 same cylinder\$3 | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:44 |
| 2 | BRS | L7 | 1022 | 6 and ((@rlad<=19990524) or (@ad<=19990524)) | USPAT | 2003/01/30 16:36 |
| 3 | BRS | L8 | 119 | 7 and (magnetic\$1 adj tape\$1) | USPAT | 2003/01/30 14:45 |
| 4 | BRS | L9 | 12 | 8 and (single\$1 same (magnetic\$1 adj tape\$1)) | USPAT | 2003/01/30 14:37 |
| 5 | BRS | L10 | 2 | 9 and (stor\$4 same ring\$1) | USPAT | 2003/01/30 14:37 |
| 6 | BRS | L12 | 2 | 11 and (stor\$4 same ring\$1) | USPAT | 2003/01/30 14:38 |
| 7 | BRS | L13 | 66 | 5403639.uref,bi. | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:43 |
| 8 | BRS | L14 | 5 | 13 and (logical\$1 same cylinder\$3) | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:44 |
| 9 | BRS | L15 | 119 | 8 and (magnetic\$1 adj tape\$1) | USPAT | 2003/01/30 16:36 |
| 10 | BRS | L16 | 119 | 15 and (magnetic\$1 adj tape\$1) | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:46 |
| 11 | BRS | L17 | 1 | 14 and (magnetic\$1 adj tape\$1) | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:46 |
| 12 | BRS | L11 | 12 | 8 and (single\$1 same (magnetic\$1 same tape\$1)) | USPAT | 2003/01/30 16:34 |
| 13 | BRS | L18 | 0 | 6 and 369.ccls. | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 16:35 |
| 14 | BRS | L19 | 0 | 369.ccls. | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 16:35 |

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|----|------|-----|-------------|--|--|---------------------|
| 15 | BRS | L20 | 72728 | 369/\$.ccls. | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 16:35 |
| 16 | BRS | L22 | 288145 4 | 21 ((@rlad<=19990524) or (@ad<=19990524)) | USPAT | 2003/01/30 16:36 |
| 17 | BRS | L23 | 15 | 21 and ((@rlad<=19990524) or (@ad<=19990524)) | USPAT | 2003/01/30 16:36 |
| 18 | BRS | L25 | 0 | 23 and longitu\$6 | USPAT | 2003/01/30 16:37 |
| 19 | BRS | L26 | 0 | 23 and latitu\$6 | USPAT | 2003/01/30 16:37 |
| 20 | BRS | L24 | 4 | 23 and (magnetic\$1 adj tape\$1) | USPAT | 2003/01/30 16:37 |
| 21 | BRS | L21 | 28 | 20 and 6 | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 16:39 |

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|----|-------------------|------------|--|------------|--|---------------------------|
| 1 | US 20030007442 A1 | 20030109 | Light intensity modulated direct overwrite magneto-optical microhead array chip hard disk drive | 369/95 | 369/124.03 | Henrichs, Joseph Reid |
| 2 | US 20020071350 A1 | 20020613 | Intelligent data storage device | 369/24.01 | 369/43 | Wood, Robert Barry |
| 3 | US 20020031334 A1 | 20020314 | Editing system and method and distribution medium | 386/54 | 360/13; 369/83; 386/64 | Tanizawa, Seiji et al. |
| 4 | US 6457096 B1 | 20020924 | Redundant recording disk device and data processing method using plural logical disks with mirrored data stored with a predetermined phase-offset | 711/112 | 360/47; 369/30.01; 369/30.19; 369/30.2; 711/114; 711/162; 714/6 | Ageishi, Narutoshi et al. |
| 5 | US 6170037 B1 | 20010102 | Method and apparatus for storing information among a plurality of disk drives | 711/114 | 360/15; 360/47; 360/8; 369/84; 711/104; 711/112; 711/161; 711/162; 711/165; 711/4 | Blumenau, Steven M. |
| 6 | US 6034831 A | 20000307 | Dynamic reverse reassign apparatus and method for a data recording disk drive | 360/53 | 360/31; 360/47; 369/53.15; 369/53.42 | Dobbek, Jeffrey J. et al. |
| 7 | US 5953744 A | 19990914 | Replication of contents of hard disk to hard disk of greater storage capacity through adjustment of address fields in sectors | 711/162 | 360/48; 369/84; 711/103; 711/161; 711/167; 711/170; 711/200 | Marasco, Bernie R. |
| 8 | US 5914916 A | 19990622 | Methods and apparatus for controlling access to a recording disk | 369/30.1 | | Totsuka, Takashi et al. |
| 9 | US 5848438 A | 19981208 | Memory mapping defect management technique for automatic track processing without ID field | 711/201 | 360/48; 360/53; 360/72.2; 360/77.02; 369/275.3; 711/1; 711/4 | Nemazie, Siamack et al. |
| 10 | US 5835299 A | 19981110 | Method for optimizing skew of hard disk drive | 360/76 | 369/44.32 | Lee, Byung-Joon et al. |
| 11 | US 5708632 A | 19980113 | Methods and apparatus for controlling access to a recording disk | 369/30.03 | | Totsuka, Takashi et al. |
| 12 | US 5619481 A | 19970408 | Information recording/reproducing method | 369/30.21 | 235/454; 369/53.35 | Hosoya, Hideki |
| 13 | US 5570332 A | 19961029 | Method for reducing rotational latency in a disc drive | 369/30.1 | 360/78.04; 369/44.28 | Heath, Mark A. et al. |
| 14 | US 5566348 A | 19961015 | System for adaptively optimizing automated optical library management | 710/18 | 369/30.3 | Dahman, Kirby G. et al. |
| 15 | US 5502836 A | 19960326 | Method for disk restriping during system operation | 711/170 | 369/44.27; 711/112; 714/3; 714/712; 714/800 | Hale, Robert P. et al. |
| 16 | US 5469546 A | 19951121 | Method for retrying recording information into a next logical block by sending sense data including address information to host computer and responding to command therefrom | 714/8 | 369/53.36; 711/112; 711/115; 714/710 | Hosoya, Hideki |

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|----|---------------|------------|---|------------|---|---------------------------|
| 17 | US 5111349 A | 19920505 | Digital servo system for moving body by a distance equal to an integral multiple of a predetermined pitch | 360/78.07 | 318/560; 318/600; 360/78.06; 369/30.17 | Moon, Ronald R. |
| 18 | US 5075804 A | 19911224 | Management of defect areas in recording media | 360/49 | 360/53; 360/54; 369/30.07; 369/47.14; 369/53.17 | Deyring, Klaus-Peter |
| 19 | US 4498146 A | 19850205 | Management of defects in storage media | 711/115 | 360/31; 369/53.42 | Martinez, Maria N. |
| 20 | JP 03076001 A | 19910402 | DISK DEVICE | | 369/43 | ISHIHARA, KOICHI |
| 21 | JP 02254678 A | 19901015 | DISK DEVICE | | 369/43 | MITSUISHI, TETSUYA et al. |
| 22 | JP 02158986 A | 19900619 | DISK CONTROLLER | | 369/FOR.10 0 | OKAMOTO, YUTAKA |
| 23 | JP 63224076 A | 19880919 | DISK DEVICE | | 369/43 | MATSUO, MASARU |
| 24 | JP 63083967 A | 19880414 | DATA RECORDING SYSTEM | | 369/43 | UCHIYAMA, YOSHIHIRO |
| 25 | JP 62246192 A | 19871027 | DISK CONTROLLER | | 369/43 | NATSUI, SATOSHI et al. |
| 26 | JP 62236184 A | 19871016 | DISK CONTROLLER | | 369/43 | NATSUI, SATOSHI |
| 27 | JP 61156577 A | 19860716 | POSITIONING CONTROLLING CIRCUIT OF DISK DRIVING DEVICE | | 369/43 | KITAMURA, YOSHITSUGU |
| 28 | EP 490485 A2 | 19920617 | Rotating memory system. | | 360/69; 369/FOR.10 0 | HOLT, NICHOLAS PETER |

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| 4 | BRS | L9 | 12 | 8 and (single\$1 same (magnetic\$1 adj tape\$1)) | USPAT | 2003/01/30 14:37 |
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| 11 | BRS | L17 | 1 | 14 and (magnetic\$1 adj tape\$1) | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:46 |
| 12 | BRS | L11 | 12 | 8 and (single\$1 same (magnetic\$1 same tape\$1)) | USPAT | 2003/01/30 15:05 |

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| 11 | BRS | L16 | 119 | 15 and (magnetic\$1 adj tape\$1) | USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B | 2003/01/30 14:46 |
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|----|---------------|------------|--|------------|--|---------------------------------|
| 1 | US 6446209 B2 | 20020903 | Storage controller conditioning host access to stored data according to security key stored in host-inaccessible metadata | 713/193 | 713/164; 713/165; 713/168 | Kern, Robert Frederic et al. |
| 2 | US 5903913 A | 19990511 | Method and apparatus for storage system management in a multi-host environment | 711/156 | 711/112; 711/147 | Ofer, Erez et al. |
| 3 | US 5761667 A | 19980602 | Method of optimizing database organization using sequential unload/load operations | 707/101 | 707/100; 707/200; 707/8; 711/129; 711/173 | Koeppen, Christian B. |
| 4 | US 5455926 A | 19951003 | Virtual addressing of optical storage media as magnetic tape equivalents | 711/4 | 711/112; 711/202 | Keele, Richard V. et al. |
| 5 | US 5438674 A | 19950801 | Optical disk system emulating magnetic tape units | 711/4 | 703/23; 707/204; 707/205; 711/112; 711/202; 711/221 | Keele, Richard V. et al. |
| 6 | US 5403639 A | 19950404 | File server having snapshot application data groups | 707/204 | 707/205; 711/113; 711/114 | Belsan, Jay S. et al. |
| 7 | US 5317728 A | 19940531 | Storage management of a first file system using a second file system containing surrogate files and catalog management information | 707/204 | 707/205 | Tevis, Gregory J. et al. |
| 8 | US 5239647 A | 19930824 | Data storage hierarchy with shared storage level | 707/205 | 711/117 | Anglin, Matthew J. et al. |
| 9 | US 4638425 A | 19870120 | Peripheral data storage having access controls with error recovery | 711/133 | 711/162; 711/163; 711/173; 711/202; 714/10; 902/37 | Hartung, Michael H. |
| 10 | US 4636946 A | 19870113 | Method and apparatus for grouping asynchronous recording operations | 711/136 | 711/113; 711/114 | Hartung, Michael H. et al. |
| 11 | US 4574346 A | 19860304 | Method and apparatus for peripheral data handling hierarchies | 711/117 | 711/112; 711/160 | Hartung, Michael H. |
| 12 | US 3955180 A | 19760504 | Table driven emulation system | 703/26 | | Hirtle, Allen C. |